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DATE MAILED: 08/25/2009

### NOTICE OF ALLOWANCE AND FEE(S) DUE

21125 7590 08/25/2009

NUTTER MCCLENNEN & FISH LLP
WORLD TRADE CENTER WEST
155 SEAPORT BOULEVARD

BOSTON, MA 02210-2604

EXAMINER
SHAHNAN SHAH, KHATOL S
ART UNIT PAPER NUMBER
1645

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/613,975	07/03/2003	Donald L. Wise	22956-0822(MIT5083)	8618			
TITLE OF INVENTION: VACCINES TO INDUCE MUCOSAL IMMUNITY							

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	11/25/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includir d below or directed oth ions.	or trans ig the F ierwise	smitting the ISSU atent, advance or in Block 1, by (a					nould be completed where correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Nose: Use Block 1 for any change of address)					Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
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BOSTON, MA				Ē		(	.,	(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR	₹	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
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nonprovisional	YES		\$755	\$300	\$0		\$1055	11/25/2009
EXAM	INER		ART UNIT	CLASS-SUBCLASS	]			
SHAHNAN SHA	H, KHATOL S		1645	424-I84100	_			
☐ "Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME AI PLEASE NOTE: Uni recordation as set forti (A) NAME OF ASSIG	ess an assignee is ident n in 37 CFR 3.11. Comp BNEE	" Indica ed. Use A TO Bl ified be bletion o	tion form of a Customer  E PRINTED ON 1 low, no assignee of this form is NO	data will appear on the p T a substitute for filing an (B) RESIDENCE: (CIT	ively, de firm (having as a agent) and the nam orneys or agents. If e printed. pe) oatent. If an assign assignment. Y and STATE OR C	n memb les of u no nan lee is id	p to p to be its 3	ocument has been filed for
Please check the appropri	ate assignee category or	catego	ries (will not be pr	inted on the patent):	Individual 🔲 C	orporati	ion or other private gro	up entity 🚨 Government
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	SMALL ENTITY state	is. See 3	37 CFR 1.27.	b. Applicant is no lor				
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if requeered of the United Sta	uired) w tes Pate	rill not be accepted int and Trademark	d from anyone other than Office.	the applicant; a reg	istered.	attorney or agent; or th	e assignee or other party in
Authorized Signature					Date			
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



BOSTON, MA 02210-2604

# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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NUTTER MCCL	ENNEN & FISH LI	SHAHNAN SHAH, KHATOL S				
WORLD TRADE		ART UNIT	PAPER NUMBER			
155 SEAPORT BO	DULEVARD	1645				

DATE MAILED: 08/25/2009

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 219 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 219 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/613.975 WISE ET AL. Notice of Allowability Examiner Art Unit Khatol S. Shahnan-Shah 1645 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 7/08/2009. The allowed claim(s) is/are 1, 3-11 renumbered 1-10. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) $\square$ All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. ☐ Examiner's Amendment/Comment Paper No./Mail Date 10/31/2003 ☐ Examiner's Comment Regarding Requirement for Deposit. 8. X Examiner's Statement of Reasons for Allowance

of Biological Material

/Khatol S Shahnan-Shah/ Examiner, Art Unit 1645 9. ☐ Other .

Page 2

Application/Control Number: 10/613,975

Art Unit: 1645

## Attachment to Notice of Allowance

1. Decision on the appeal from the Patent Examiner's rejections of claims 1 and 3-11, under 35 U.S.C. § 6(b) of 7/08/2009 is acknowledged.

# Status of Claims

2. Claims 1, 3-11 are pending and under examination.

# Rejections Withdrawn

- 3. Rejection of claims 1, 3-11 rejected under 35 U.S.C. 112 second paragraph, made in paragraph 5 of the office action mailed 5/18/2007 is withdrawn pursuant to the BPAI decision of 7/08/2009.
- Rejection of claims 1, 3-11 under 35 U.S.C. 112 first paragraph made in paragraph 7 of the office action mailed 5/18/2007 is withdrawn pursuant to the BPAI decision of 7/08/2009.
- Rejection of claims 1, 3-11 under 35 U.S.C. 103(a), made in paragraph 8 of the office action mailed 5/18/2007 is withdrawn pursuant to the BPAI decision of 7/08/2009.

### Allowable Subject Matter

6. The following is an examiner's statement of reasons for allowance:

Claims 1, 3-11 are allowed. Claims are renumbered 1-10.

The claims are drawn to: A vaccine composition for inducing an immune response to a pathogen comprising a nucleic acid encoding an antigen eliciting an immune response to the pathogen encapsulated in a mucoadhesive controlled release particulate formulation comprising an open-celled polymeric foam of approximately 95 % void volume, or particles thereof. The prior art fails to disclose or suggest such a composition.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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# Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khatol S. Shahnan-Shah whose telephone number is (571)-272-0863. The examiner can normally be reached on Mon, Wed 12:30-6:30 pm, Thur-Fri 12:30-4:30pm pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert B. Mondesi can be reached on (571)-272-0956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Khatol S Shahnan-Shah/ Examiner, Art Unit 1645 August 5, 2009

/Robert B Mondesi/ Supervisory Patent Examiner, Art Unit 1645